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ABSTRACT

This paper describes the implementation and effects of a behavior management system in eight middle schools, including control schools, in an urban school district. The components of the system included school discipline policy review and revision, computerized behavior tracking, classroom organization and management, and positive reinforcement. The components were implemented in the context of an organization development process designed to increase school staff commitment to the program. The treatment schools and control schools showed improvement over the 3-year project period, with greater improvement for the treatment schools, which reported significant effects on student reports of classroom order and organization, and clarity of rules. For the treatment schools, the extent of improvement corresponded to the strength of the implementation of the components. Nearly 40 references are cited. (RH)

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Center for Research On Elementary & Middle Schools

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Report No. 37

April, 1989

REDUCING DISORDERLY BEHAVIOR IN MIDDLE SCHOOLS

Denise G. Gottfredson, Nancy L. Karweit and Gary D. Gottfredson

The Johns Hopkins University

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The Center

The mission of the Center for Research on Elementary and Middle Schools is to produce useful knowledge about how elementary and middle schools can foster growth in students' learning and development, to develop and evaluate practical methods for improving the effectiveness of elementary and middle schools based on existing and new research findings, and to develop and evaluate specific strategies to help schools implement effective research-based school and classroom practices.

The Center conducts its research in three program areas: (1) Elementary Schools; (2) Middle Schools, and (3) School Improvement.

The Elementary School Program

This program works from a strong existing research base to develop, evaluate, and disseminate effective elementary school and classroom practices; synthesizes current knowledge; and analyzes survey and descriptive data to expand the knowledge base in effective elementary education.

The Middle School Program

This program's research links current knowledge about early adolescence as a stage of human development to school organization and classroom policies and practices for effective middle schools. The major task is to establish a research base to identify specific problem areas and promising practices in middle schools that will contribute to effective policy decisions and the development of effective school and classroom practices.

School Improvement Program

This program focuses on improving the organizational performance of schools in adopting and adapting innovations and developing school capacity for change.

This report, prepared by the School Improvement Program, examines the effects of an urban school system's implementation of a program to reduce disorderly behavior of middle school students.

Abstract

This paper describes the implementation and effects of a behavior management system in eight middle schools (including control schools) in an urban school district. The components of the system included school discipline policy review and revision, computerized behavior tracking, classroom organization and management, and positive reinforcement. The components were implemented in the context of an organization development process to increase school staff commitment to and ownership of the program. The treatment schools and control schools showed improvement over the three-year project period, with greater improvement for the treatment schools, which reported significant effects on student reports of classroom order, classroom organization, and clarity of rules. For the treatment schools, the extent of improvement corresponded to the strength of the implementation of the components.

Reducing Disorderly Behavior in Middle Schools

Providing adequate opportunity for learning is a central goal for effective schools. Research on effective schools (Brookover, Beamer, Efthim, Hathaway, Lezotte, Miller, Passalacqua, & Tornatzky, 1982; Edmonds, 1979) and on effective teaching practices (Brookover et al., 1982; Fisher, Berliner, Filby, Marliave, Cahen, & Dishaw, 1980) implies that effective schools maximize the time students spend engaged in learning. Adequate learning time is a necessary condition for student achievement.

Many factors -- from the number of legislated school days to the student's interest in learning about a particular topic -- influence learning time, but disruptive behavior is a major contributor to its loss. Gallup polls and reports on the condition of the nation's schools (Cabinet Council on Human Resources, 1984; National Commission on Excellence in Education, 1983) point to disorder in schools as a primary obstacle to achievement. Disruptive behavior reduces learning time for the offending student who is frequently removed from the classroom as well as for non-offending classmates whose learning is interrupted as the teacher attempts to bring the disruptive student's behavior in line.

Charleston County School District (CCSD) is typical of the nation in its struggle to reduce disorderly behavior. In Charleston's middle schools "normal" adolescent rebelliousness combines with a low level of investment in education among members of an exceptionally large population of multiply-retained youths to create high levels of disorder in the classroom. The problem dissipates at the high school level as the less committed students drop out of school.

The suspension rate in the CCSD middle schools has ranged from 27 to 41 suspensions per 100 students per year since 1981. This high overall rate masks large differences from school to school. For example, during the 1986-87 school year, one Charleston middle school had a rate of 2 and another a rate

of 100 suspensions per 100 students. These two schools served virtually identical student populations.

These high rates of out-of-school suspension translate into many lost instructional days. Last year in the six schools participating in the program I am about to describe, 2,042 suspensions resulted in approximately 3,850 student instructional days lost to out-of-school suspension. These schools also operate in-school suspension programs. The quality of the program varies from school to school, but even in the programs which require teachers to provide work for students in the in-school suspension room students lose valuable instruction. If we add days spent in in-school suspension to our tally of lost instructional days, we find that 7,932 instructional days were lost in these six middle schools last year. This translates into 44 lost student years in one academic year.

What behaviors result in suspension? A study by the Children's Defense Fund estimated that in 1975, 63% of suspensions were for offenses not dangerous to persons or property, 25% were related to truancy or tardiness, and 3% were for destruction of school property, criminal activity, or drug and alcohol use (Children's Defense Fund, 1975). We do not know to what extent these data apply to the Charleston County schools, but an assessment of reasons for suspension in one CCSD middle school over a three-month period showed that of the 158 in- and out-of-school suspensions, 50 (32%) were for serious offenses (mostly fighting), 52 (33%) were attendance-related, and 56 (35%) for classroom disruption or disrespectful behavior in class.

Evidence from the Effective School Battery (Gottfredson, 1984b) student survey which was administered to all middle school students during the baseline year for our study also indicated high levels of suspension and other forms of punishment for misbehavior. Each of the eight schools surveyed scored higher than the average score for schools included in norming sample for this battery (mostly urban secondary schools in the U.S.) on a measure which asks students to report the frequency of punishment received in school. Only one of the eight Charleston schools scored within one standard deviation of schools in the

norming sample, four were more than two standard deviations above the mean, and two were at the 99th percentile. These data are of concern because individual scores on this school punishment scale correlate highly with other measures of adolescent behavior problems and school failure. For example, students who report high levels of punishment also report high levels of delinquent behavior and low levels of integration into the school culture (Gottfredson, 1984b).

Intervention Strategies

Researchers at the Johns Hopkins University Center for Research on Elementary and Middle Schools are working with CCSD to develop, evaluate, and refine a program to reduce disorderly behavior in the middle schools. This collaborative effort began during the 1986-87 school year, a planning year, and is continuing through the current school year. Eight schools--six treatment and two control--were selected to participate by district central administrators. Principals in the eight schools agreed to participate, and then the researchers designated two of the eight schools as control. This assignment was made on the basis of demographics and school size in an attempt to ensure that the control schools were not at either extreme of the distribution on these factors.

In preliminary meetings with the participating schools we learned about the nature of the disciplinary problems they faced, and then consulted the research literature for guidance in developing a pilot program for the district. Following is a brief description of the components of the intervention strategy which resulted.

School Discipline Policy Review and Revision. Research on the sources of school disruption clearly indicates that schools in which the students and teachers say they understand what the school rules are and that the school rules are administered fairly and consistently experience less disruption than others (Gottfredson & Gottfredson, 1985). The first component of the program therefore calls for revising the school's discipline policy to increase rule clarity,

specify the consequences for each infraction, and coordinate the school-wide policy with individual classroom policies. Compliance with the policy is monitored and the policy is revised periodically until one that is regarded as fair by students and staff and that the school is able to consistently enforce is achieved. Discipline policies also contain provisions for systematically rewarding desired student behavior.

Behavior Tracking System. Programs which involve parents in providing consequences in the home for student behavior in school have proven effective for reducing undesirable behavior. Home-based reinforcement programs (Atkeson & Forehand, 1979; Barth, 1979; Bailey, Wolf & Phillips, 1970), which get parents to provide reinforcers such as special meals, family outings, extra time with parents, extra privileges, etc. in response to positive school behavior are clearly effective for increasing desireable behavior. One element of home-based reinforcement involves frequent communication between the school and the home to inform the parents about the students' behavior, an activity that many schools find difficult to accomplish systematically and frequently enough to make a difference. The objective of the Behavior Tracking System is to increase the frequency of communication with parents about student school behavior and to change the nature of the communication so that parents learn about positive as well as negative behavior.

The computerized Behavior Tracking System stores information about every positive and negative referral to the office. It is used to record referral information, generate letters to the home to inform parents about positive and negative referrals to the office and about disciplinary actions taken against the student, and generate reports useful for managing school discipline (e.g., detention lists, lists of students and teachers with more than a specified number of referrals, summary reports of suspensions). It is also intended to promote consistency in rule enforcement by reminding the administrator of the administrative responses allowable for each offense, according to the school's discipline code.

Classroom Organization and Management. Effective organization and management of the classroom can reduce disorder in the class (Emmer, Evertson, Sanford, Clements, & Worsham, 1984). Among the important teacher practices related to classroom disorder are clear and effectively communicated rules and procedures, careful monitoring of student behavior and follow-through with consequences for breaking rules, maintaining student responsibility for academic work using a fair grading system and frequent and systematic feedback about student progress, instructional clarity, and organizing instruction with attention to the type, sequence, and pace of activities as well as to the efficiency of transitions from activity to activity.

This third component of the Charleston program is designed to replicate as closely as possible the intervention used by University of Texas researchers which demonstrated a reduction in classroom disorder using a teacher training intervention focusing on the teacher behaviors described above. We used the same materials and enlisted the help of two of the original University of Texas researchers to provide the initial training. We also adapted the original system of classroom observations for monitoring implementation of the new classroom practices.

Positive Reinforcement Strategies. Most demonstrably effective classroom management strategies are built around social learning principles: Consequences or events that follow a behavior affect future behavior. Reinforcers increase the behavior, punishments decrease the behavior. Carefully controlled experiments in which researchers have worked closely with teachers have shown that contingent use of teacher and peer attention, soft-verbal reprimands, and short-term time out from positive reinforcement are effective for reducing the level of disruptive behavior and increasing the level of appropriate behavior in the classroom (O'Leary & O'Leary, 1977). The research supporting a variety of social learning strategies is compelling: Successful techniques include changing antecedent conditions (O'Leary, Kaufman, Cass & Drabman, 1970); modeling (Broden, Bruce, Mitchell, Carter & Hall, 1970); social reinforcement (Hall, Lund & Jackson, 1968; Madsen, Becker,

Thomas, Koser & Plager, 1968; Madsen, Madsen, Saudargas, Hammond, Smith & Edgar, 1970; McAllister, Stachowiak, Baer & Conderman, 1969; Thomas, Becker, & Armstrong, 1968); activity reinforcement (Harris & Sherman, 1974; Lovitt, Guppy, & Blatner, 1969; Osborne, 1969); token reinforcement (Brooks, 1975; Miller & Schneider, 1970; O'Leary & Drabman, 1971); time-out (Sloane & Macaulay, 1968; Wahler, 1969); and response cost (Barrish, Saunders & Wolf, 1969; Kazdin, 1972). Research overwhelmingly supports the effectiveness of social reinforcers (praising, complimenting, smiling) as consequences for improving behavior.

The fourth component of Charleston's behavior management program is based on the view that misbehavior results in part because the environment reinforces undesirable behaviors and fails to reinforce desirable behaviors. It is designed to help school personnel to structure the school environment so that (a) expectations for student behavior are understood by students and staff; (b) consequences for misbehavior are understood by students and staff; (c) misbehavior is responded to consistently and in accordance with well communicated rules and consequences; and (d) desirable behavior receives positive reinforcement. We developed a training manual and used it in conjunction with an existing book on modifying classroom behavior (Buckley & Walker, 1978). The Buckley and Walker book covers general principles of behavior modification, and the manual covers specific strategies for (a) increasing individual's desirable behavior (contingency contracting, home-based reinforcement, and token economy), (b) decreasing undesirable behaviors (e.g., extinction, time-out and response-cost), and (c) increasing desirable behaviors for an entire class (e.g., the "Good Behavior Game" and whole-class token economies).

Method of Implementation

Much field research fails because the intended interventions are not implemented as anticipated. Parts of the PDE method (Gottfredson, 1984a; Gottfredson, Rickert, Gottfredson & Advani, 1984) are being used in the Charleston project to achieve faithful implementation of the intended interven-

tions. We are using components of the PDE method to (a) ensure that the goals of the project and the theoretical rationale that connects the activities to be implemented with problems we seek to reduce are clearly understood; (b) ensure that the shorter term objectives of the program (i.e., the intermediate outcomes such as an increase in the perceived clarity of the school and classroom rules) are clearly understood; (c) measure the goals and objectives frequently and provide timely feedback about the extent to which goals and objectives are being met; (d) establish clear performance standards; (e) assess organizational obstacles and create plans to overcome them; (f) monitor performance on an ongoing basis and provide workers with feedback about their performance; and (g) clearly specify critical benchmarks and tasks and the person(s) responsible for accomplishing each task by when. Previous field trials indicated that the full PDE method was a useful tool for bringing about effective change in a variety of settings, including inner city schools in Baltimore (Gottfredson, 1987; Gottfredson & Gottfredson, 1987).

School improvement teams. A team of school staff persons in each school is expected to use components of the PDE method to increase the strength and fidelity of program implementation. Each principal identified five to ten original team members during the planning year. They receive either a small stipend ($100) or three graduate credits for their work.

Two members of each team (one administrator and one teacher) received brief training during the planning year in the PDE planning method. These team members were expected to lead their teams through a planning process to prepare the school for the program which would begin the next Fall. This small group of twelve (two persons from each treatment school) worked together to specify concrete performance standards for each program component, and team leaders worked with their individual teams to specify in what ways standards for their specific school would differ. Specifying concrete performance standards is an important step in the PDE method. These standards are expected to provide concrete, observable standards against which the actual performance of the implementing staff can be compared.

The school teams also reviewed and revised their school discipline policy, oriented their faculties to the program and developed a strategy for school-wide implementation of the new practices. Teams of "experts" were identified in each school. These experts are classroom teachers who volunteered to join the school improvement team and to become part of a staff development effort in the school. Six to ten teacher volunteers from each school agreed to attend a training workshop to learn about the classroom organization and management and behavior change strategies, organize and carry out staff development workshops covering these strategies for their entire school staffs, monitor the level of implementation of the new strategies in their colleagues' classrooms, and provide constructive feedback and ongoing technical support to their colleagues as they implemented the new practices. "Experts" were given the option of receiving a small stipend or graduate credit through the local community college for their extra work to improve discipline practices in their schools.

The membership of this team changes each year. Some schools elected to rotate faculty members each year. Others elected to keep the same members for two years. The renewed teams receive the same training at the beginning of the second program year that the original team members received.

Information feedback. Information feedback is an integral component of the PDE method. Feedback to individual teachers occurs informally when team members provide assistance and suggestions about ways to improve classroom practices. Teachers also receive individualized feedback twice each year from student and teacher surveys (to be described below), and they receive feedback about their disciplinary referrals at the discretion of the assistant principal or principal.

All teachers fill out logs to record which behavior change strategies they use with their students and classes. These logs are used by team members to monitor teacher use of the new strategies. We also experimented with classroom

observations by team members. Team members used observation forms designed to measure student engagement rates and the extent to which teachers are achieving the standards for classroom organization and management. These observations were dropped from the program after the first year when efforts to overcome severe scheduling and time problems and teacher discomfort with "evaluating" one another proved unsuccessful.

Teams also receive feedback at the school level. Classroom climate inventories designed to measure classroom organization and management, rule clarity, teacher support, and disruptive behavior in the classroom are administered to teachers and students quarterly. School averages for all teachers in each school are reported to the school teams four times per year. A comprehensive school assessment battery (The Effective School Battery; G. Gottfredson, 1984b) is also administered to teachers and students annually. This battery provides much of the data necessary for the evaluation of the project, and serves as an important source of information for organizational development work in the schools. Once per year we work with the administrators of the participating schools to present the ESB results, help schools interpret the results, and discuss strategies for improving weak areas identified by the surveys.

All disciplinary incidents and positive rewards to students generated by the office are recorded in the computerized Behavior Tracking System. The computer records are sent to Hopkins periodically and information on the number and nature of disciplinary incidents compared with previous years and on the use of and days lost to suspension is provided for the school teams quarterly. The BTS also provides schools with the capability to generate on-the-spot summaries of referrals by teacher or student.

To summarize, Charleston's behavior management system has four components: (a) school discipline policy review and revision, (b) computerized behavior tracking, (c) classroom organization and management, and (d) positive reinforcement. These "technological" components are implemented in the

context of a limited organization development activity aimed at increasing school staff commitment to and ownership of the program and providing school staff with the planning and management skills and information necessary to effectively manage the implementation of the school improvement program in their own schools.

Methods

In this paper I report interim results of the evaluation of the program just described. This evaluation considers only results from classroom climate surveys which are administered quarterly to all teachers and students in all classes except gym in a specified period. Surveys are completed by teachers and students in the six treatment and the two control schools.

Five scales measure classroom climate. One is based on teacher reports, and four on student reports. Following is a brief description of each scale.

Classroom Order--Teacher Reports. This is a sixteen item scale of Likert-type items asking the teacher to report the extent to which students engage in a range of disorderly behaviors and the extent to which disorderly behavior disrupts the learning process. The behaviors reported range in seriousness from failing to pay attention to destroying or damaging property in the class. Classes with high scores on this scale experience less disorder than classes with low scores. The scale is formed by averaging the sixteen items. Its alpha reliability, estimated with the data from one quarter, is .94.

Classroom Order--Student Reports. This is a fourteen-item scale of Likert-type items asking students to report the extent to which students engage in a range of disorderly behaviors and the extent to which disorderly behavior disrupts the learning process. The behaviors reported range in seriousness from failing to pay attention to destroying or damaging property in the class. Classes with high scores on this scale experience less disorder than classes with low scores. The scale is formed for each classroom by averaging the classroom means for each of the fourteen items. Its alpha reliability, estimated with the data from one quarter, is .96.

Order and Organization--Student Reports. This is a five item scale of true-false items asking students to report about the level of organization in the class and the extent to which students are engaged by what is happening in the class. Classes with high scores are more well-organized and engaged than classes with low scores. The scale is formed for each classroom by averaging the

classroom means for each of the five items. Its alpha reliability, estimated with the data from one quarter, is .89.

Rule Clarity--Student Reports. This is a three-item scale of true-false items asking students to report on the clarity of the classroom rules. Classes with high scores are those in which students report that there is a clear set of rules to follow, and that the teacher explains the rules and the consequences for breaking them. The scale is formed for each classroom by averaging the classroom means for each of the three items. Its alpha reliability, estimated with the data from one quarter, is .80.

Teacher Support--Student Reports. This is a three-item scale of true-false items asking students to report about the supportive nature of the teacher. Classes with high scores are those in which students report that the teacher takes a personal interest in the students, goes out of this or her way to help the students, and is like a friend. The scale is formed for each classroom by averaging the classroom means for each of the three items. Its alpha reliability, estimated with the data from one quarter, is .82. Although increasing teacher support is not an objective of the program, we include this measure because previous experience with programs which sought to increase rule clarity and consistency of rule enforcement suggested that an unintended side effect of such programs is a decline in students' perceptions of the teacher support.

Results

Table 1 shows the means and standard deviations for the five classroom environment measures described above. The means shown on the table are averages of individual classroom averages which are themselves averages of scale scores across all quarters in which the classroom participated in the survey each year. Therefore, the scores which are averaged and presented on the table are themselves averages of one, two, three, or four quarters of data for each year, depending on the number of quarters each class participated. These means are presented separately for treatment and control schools and for each of the three years of the project. Year one is the planning year, and year three is the current school year, which, of course, is not over yet.

The table shows improvement for treatment and control schools over the project period, but the improvement is greater for the treatment schools. For the treatment schools, all five measures are higher in the third year than in the baseline year, and the improvement is statistically significant for students'

reports of Classroom Order, Classroom Organization, and Rule Clarity. For the control schools, four of the five measures improved over the entire period, and the improvement for Rule Clarity is significant.

The results in Table 1 mask the considerable variation across schools in the strength of implementation and in the effectiveness of the program. Three of the six treatment schools successfully implemented all or most of the program components. Three implemented the components weakly, if at all. Figure 1 shows the series of Classroom Order mean scores (student reports) for the ten quarters for which we have data so far.[1]

These series are shown separately for the three strong implementation treatment schools, the three weak implementation treatment schools, and the two control schools. The graph shows that the low implementation schools' performance was similar to the control schools'. They are marked by the same pattern of seasonal variation in classroom order, but there is gradual improvement, albeit slight, over the ten quarters. The high implementation treatment schools started off with significantly lower classroom order but end up (so far) at the top of the order. Their scores are marked by the same ebb and flow pattern as the other schools, but their improvement is more dramatic over the ten quarters.

Discussion

The data described above are entirely consistent with the reports of school team members and principals about the strength of implementation in their schools. The three low implementation schools report that they have been unable to achieve strong implementation in their schools. A report of the perceptions of school personnel about the program documents in detail the perceived sources of the implementation difficulties (Hess, Mack, & Gottfredson,

[1]The number of classrooms on which each graphed point is based varies from quarter to quarter. Minimum and maximum N's for each group of schools are: Control: 38, 49; Low Implementation: 68, 83; High Implementation: 65, 91.

1989). The biggest differences between the low and high implementation schools are team leadership and staff commitment to the program.

Weak team leadership in the early stages of the program resulted in low staff commitment. Participants agreed that the way the program was introduced to the staffs affected greatly the level of staff commitment to the program. At one of the low implementation schools, the computerized behavior management component of the program was overemphasized and the components that would involve staff effort were underemphasized in initial meetings with the staff. Team members were not fully briefed on the program before they attended the initial training and were surprised to learn of the critical role they would be expected to play in staff development in their schools. The principal of this school left after the planning year and the assistant principal who had responsibility for the program left midway through the first implementation year. It took the new administrators time to accept the program as their own, and by then it was difficult to generate commitment to the program, even among the team members.

In another low implementation school, the principal who agreed to be in the project was replaced just before the initial training. The assistant principal took responsibility for the project, but the new principal did not give high priority to the project during the first year, and the assistant principal left in the beginning of the second year. Weak leadership was also a problem in the third low implementation school. The principal has never taken a leadership role, and the assistant principal who had responsibility for the project was a weak leader and left after the first year.

In short, weak leadership by the school's administration is such an overriding factor in these schools that the teams are unable to work effectively to develop and implement the program. The team members report feeling as though they are in the difficult position of trying to get the faculties to implement a program they do not own, and feeling little support in this task from their building administrators.

It is interesting that the control schools performed as well as these low implementation schools, if not better. Control schools received some services. They received school-level feedback from the classroom surveys and the annual climate survey identical to the treatment schools. They also received feedback on the number of disciplinary referrals annually. Their teachers received the same individualized feedback from the classroom climate surveys that the treatment school teachers received. An administrator from each treatment school attended each of the feedback meetings and participated in discussions about how to strengthen the program. These administrators were also given copies of materials used in training sessions for the treatment school teams. Over the next several months we will be studying exactly how the control schools used these materials. It may well be that simply providing information feedback in a low-pressure atmosphere promotes more beneficial change than more intensive efforts in the absence of skilled leadership.

Conclusion

Survey data and practitioner's perceptions agree that the strategies implemented in CCSD's pilot program to reduce disorderly behavior are effective. The quarterly student surveys show overall statistically significant improvement in students' reports of classroom orderliness. These overall improvements mask large differences from school to school in the effectiveness of the program.

The most evident implications for improving the program include engaging the staff in activities aimed at building commitment prior to the initiation of the school improvement endeavor, and ensuring administrative support for the program and administrator stability. It may also be more productive to train all teachers in the behavior and classroom management strategies and to

use the teams in a peer coaching and support role only. Our experience implies that even in the "strong implementation" schools, the behavior management strategies are not being implemented in as strong a form as they could be because the training for the entire school staffs delivered by team members was relatively weak.

References

Atkeson, B. M., & Forehand, R. (1979). Home-based reinforcement programs designed to modify classroom behavior: A review and methodological evaluation. Psychological Bulletin, 86, 1298-1308.

Bailey, J. W., Wolf, M. M., & Phillips, E. L. (1970). Home-based reinforcement and the modification of pre-delinquent classroom behavior. Journal of Applied Behavior Analysis, 3, 223-233.

Barrish, H. H., Saunders, M., & Wolf, M. M. (1969). Good behavior game: Effects of individual contingencies for group consequences on disruptive behavior in a classroom. Journal of Applied Behavior Analysis, 2, 119-124.

Barth, R. (1979). Home-based reinforcement of school behavior: A review and analysis. Review of Educational Research, 49, 436-458.

Broden, M, Bruce D., Mitchell, M. A., Carter V, & Hall, R. V. (1970). Effects of teacher attention and a token reinforcement in a junior high school special education class. Exceptional Children, 36, 341-349.

Brookover, W. B., Beamer, L., Efthim, H., Hathaway, D., Lezotte, L., Miller, S., Passalacqua, J., & Tornatzky, L. (1982). Creating effective schools: An inservice program for enhancing school learning climate and achievement. Holmes Beach, FL: Learning Publications.

Brooks, B. D. (1975). Contingency management as a means of reducing school truancy. Education, 95, 206-211.

Buckley, N. K., & Walker, H. M. (1978). Modifying classroom behavior. Champaign, IL: Research Press.

Cabinet Council on Human Resources. (1984). Disorder in our public schools (Memorandum from the CCHR Working Group on School Violence/Discipline). Washington, DC: The White House.

Children's Defense Fund. (1975). School suspensions: Are they helping children? Washington, DC: Author.

Edmonds, R. (1979). Effective schools for the urban poor. Educational Leadership (October), 15-24.

Emmer, E. T., Evertson, C. M., Sanford, J. P., Clements, B. S., & Worsham, M. E. (1984). Classroom management for secondary teachers. Englewood Cliffs, NJ: Prentice-Hall.

Fisher, C. W., Berliner, D. C., Filby, N. N., Marliave, R., Cahen, L. S., & Dishaw, M. M. (1980). Teaching behaviors, academic learning time, and student achievement: An overview. In C. Denham & A. Lieberman (Eds.), Time to learn (pp. 7-32). Washington, DC: National Institute of Education.

Gottfredson, D. C. (1987). An evaluation of an organization development approach to reducing school disorder. Evaluation Review, 11, 739-763.

Gottfredson, G. D. (1984a). A theory-ridden approach to program evaluation: A method for stimulating researcher-implementer collaboration. American Psychologist, 39, 1101-1112.

Gottfredson, G. D. (1984b). Effective School Battery: User's manual. Odessa, FL: Psychological Assessment Resources.

Gottfredson, G. D., & Gottfredson, D. C. (1985). Victimization in schools. New York: Plenum.

Gottfredson, G. D., & Gottfredson, D. C. (1987). Using organization development to improve school climate (Report No. 17). Baltimore: The Johns Hopkins University, Center for Research on Elementary and Middle Schools.

Gottfredson, G. D., Rickert, D. E., Gottfredson, D. C., & Advani, N. (1984). Standards for Program Development Evaluation plans. Psychological Documents, 14, 32. (Ms. No. 2668)

Grant, J., & Capell, F. (1983). Reducing school crime: A report on the school team approach. San Rafael, CA: Social Action Research Center.

Hall, R. V., Lund, D., & Jackson, D. (1968). Effects of teacher attention on study behavior. Journal of Applied Behavior Analysis, 1, 1-12.

Harris, V. W., & Sherman, J. A. (1974). Homework assignments, consequences, and classroom performance in social studies and mathematics. Journal of Applied Behavior Analysis, 7, 505-519.

Hess, B., Mack, D., & Gottfredson, D. (1989). Interim report on Project BASIS. Unpublished manuscript. Baltimore: Johns Hopkins University, Center for Research on Elementary and Middle Schools.

Kazdin, A. E. (1972). Response cost: The removal of conditioned reinforcers for therapeutic change. Behavior Therapy, 3, 533-546.

Lovitt, T. C., Guppy, T. W., & Blattner, J. E. (1969). The use of a free-time contingency with fourth graders to increase spelling accuracy. Behavior Research and Therapy, 7, 151-156.

Madsen, C. H., Jr., Becker, W. C., Thomas, D. R., Koser, L., & Plager, E. (1968). An analysis of the reinforcing function of sit-down commands. In R. K. Parker (Ed.), Readings in educational psychology. Boston: Allyn & Bacon.

Madsen, C. H., Jr., Madsen, C. K., Saudargas, R. A., Hammond, W. R., Smith, J. B., & Edgar, D. E. (1970). Classroom RAID (Rules, Approval, Ignore, Disapproval): A cooperative approach for professionals and volunteers. Journal of School Psychology, 8, 180-185.

McAllister, L. W., Stachowiak, J. G., Baer, D. M., & Conderman, L. (1969). The application of operant conditioning techniques in a secondary school classroom. Journal of Applied Behavior Analysis, 2, 277-285.

Miller, K. L., & Schneider, R. (1970). The use of a token system in a project Head-Start. Journal of Applied Behavior Analysis, 3, 213-220.

National Commission on Excellence in Education (1983). A nation at risk: The imperative for educational reform (A report to the nation and the Secretary of Education). Washington, DC: U. S. Department of Education. (ERIC No. ED 226 006)

O'Leary, K. D. & Drabman, R. (1971). Token reinforcement programs in the classroom: A review. Psychological Bulletin, 75, 379-398.

O'Leary, K. D., Kaufman, F. F., Kass, R. E., & Drabman, R. S. (1970). The effects of loud and soft reprimands on the behavior of disruptive students. Exceptional Children, 37, 147-155.

O'Leary, K. D., & O'Leary, S. G. (1977). Classroom management: The successful use of behavior modification (2nd ed.). New York: Pergammon.

Osborne, G. J. (1969). Free-time as reinforcer in the management of classroom behavior. Journal of Applied Behavior Analysis, 2, 113-118.

Sloane, H. N., & Macaulay, B. D. (Eds.). (1968). Operant procedures in remedial speech and language training. New York: Houghton Mifflin.

Thomas, D. R., Becker, W. C., & Armstrong, M. (1968). Production and elimination of disruptive classroom behavior by systematically varying teacher's behavior. Journal of Applied Behavior Analysis, 1, 35-45.

Wahler, R. G. (1969). Setting generality: Some specific and general effects of child behavior therapy. Journal of Applied Behavior Analysis, 2, 239-246.

Table 1

Means and Standard Deviations for Classroom Environment Assessment Measures, Three Years, Treatment and Control Schools

Measure	Treatment			Control		
	M	SD	N	M	SD	N
Year 1 (baseline)						
Classroom Order, Students	3.28	.49	211	3.44	.39	59
Classroom Order, Teachers	3.71	.61	211	3.90	.50	59
Classroom Organization	1.67	.16	211	1.73	.14	59
Rule Clarity	1.83	.10	211	1.85	.07	59
Teacher Support	1.66	.16	211	1.68	.16	59
Year 2						
Classroom Order, Students	3.38**	.51	206	3.44	.43	61
Classroom Order, Teachers	3.68	.62	207	3.85	.47	60
Classroom Organization	1.70	.16	207	1.73	.15	61
Rule Clarity	1.86**	.09	207	1.86	.10	61
Teacher Support	1.68	.16	206	1.66	.17	61
Year 3 (partial)						
Classroom Order, Students	3.46**	.54	210	3.55	.43	56
Classroom Order, Teachers	3.77	.62	211	3.97	.47	56
Classroom Organization	1.72**	.17	210	1.74	.14	56
Rule Clarity	1.89**	.10	210	1.88*	.08	56
Teacher Support	1.69	.16	210	1.68	.15	56

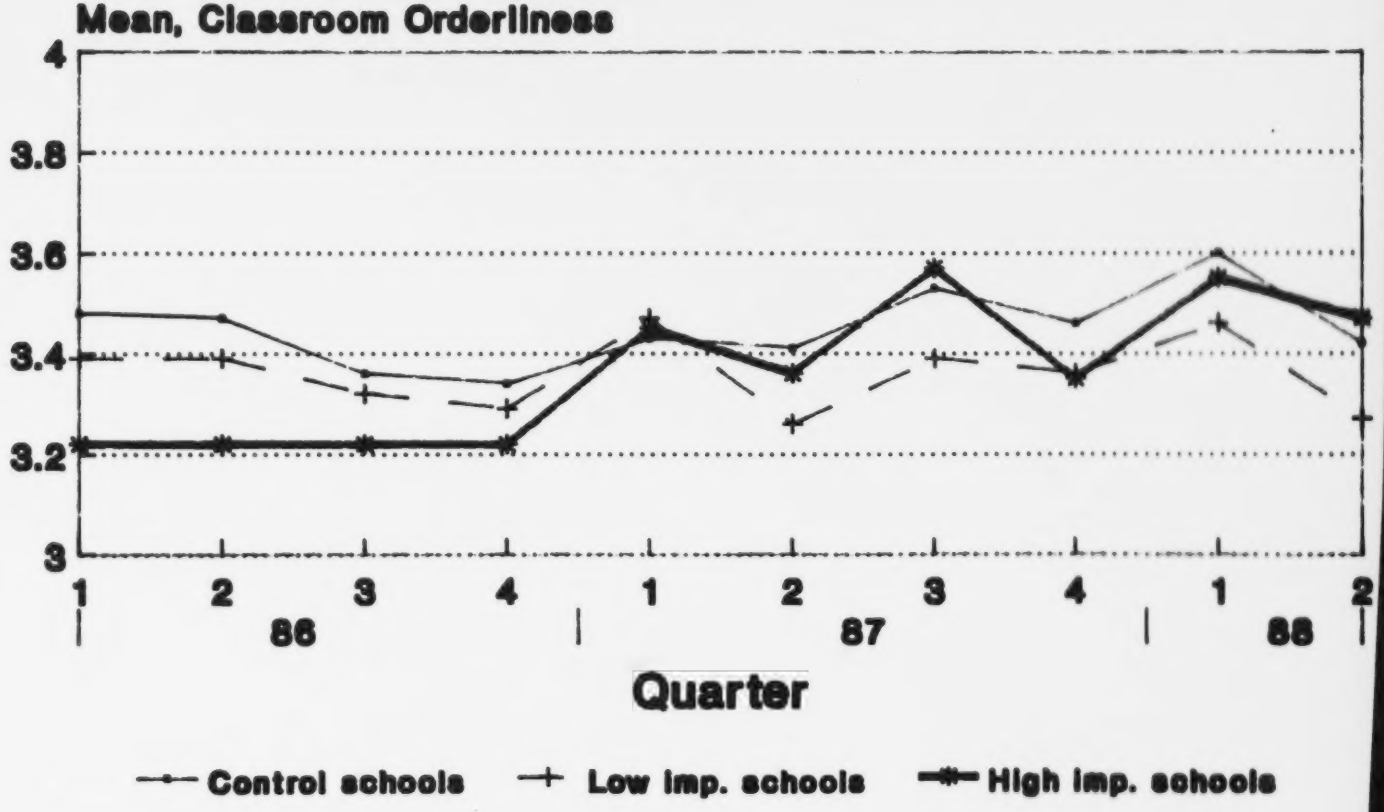
Note. Means are based on classroom averages for all classrooms participating in the survey for all quarters each year except Year 3, which includes only the first two quarters.

*Difference between mean for starred year and baseline year is significant at the $p < .05$ level.

**Difference between mean for starred year and baseline year is significant at the $p < .01$ level.

Figure 1

Student Reports of Classroom Order by Level of Implementation, 10 Quarters



First 4 Quarters are Baseline